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HOUSEKEEPERS' CHAT Wednesday, May 11, 1938

(FOR BROADCAST USE ONLY)

Subject: "NEWS FOR HOME CANNERS." Information from the Office of Experiment Stations, United States Department of Agriculture.

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Both the West and the East contribute the news for today -- news about home canning. The Washington State Experiment Station and the Massachusetts Station have been making studies of canning for the housewife. So I am reporting today a few of their findings.

Have you ever wondered how much you saved by canning your own food? Have you ever debated whether glass jars or tin cans were cheaper to use? Or which canning method was most economical? Or which fuel was cheapest? If you have, you'll be interested in what Enid Sater learned when she made a study of home canning costs at the Washington Station.

When Miss Sater went shopping for glass jars and tin cans, she found a considerable difference in the price of different kinds of containers -- as much as from 2 to 10 cents apiece. She also found that buying canning supplies in quantity may mean a substantial saving. By buying a thousand tin cans at a time, she could save over 8 dollars. Buying new lids and rubbers for glass jars in quantity also was a saving. So she suggests that several families may well go in together and purchase their supplies in bulk if one family can't use that much. The cost of tin cans, she says, depends not only on the number you buy at a time but also on the kind -- whether they are plain or enameled. The price also may vary with the locality. Miss Sater made her study in the State of Washington. But in parts of the country where cans must be shipped a great distance, they are considerably higher in price.

As to the question of which is cheaper, tin or glass, Miss Sater says that no rule holds in all cases. It depends a good deal on how long your glass jars last and there are no figures on the average life of a glass jar used for home canning. But aside from this, Miss Sater found that canning in tin was slightly cheaper because tin canning takes less fuel. The initial cost of glass, she found, was 2 or 3 times as much as tin. And sometimes new tops and rubbers for glass cost almost as much as new cans. Of course, the sealing machine seems expensive to buy. But when you divide its original cost by the number of cans it seals, it doesn't seem so expensive. For example, one manufacturer who makes a 15-dollar sealer claims that his machine will seal 250 thousand cans without needing repairs. This would make the cost of sealing come to just one cent for 166 cans.

In deciding between tin and glass Miss Sater gives some points on both sides. She says hot tin cans are easier to handle because there is no danger of breakage; new cans are easier to sterilize than used jars; no juice is lost during the processing of food in tin; and you can process more food at a time in a pressure cooker if it is packed in tin. On the other hand, you can use glass jars over and over; you don't have to label them as you do tin because the contents are visible; and, finally, most women take more pride in their canned product if they can see it.

Now about the canning method. Miss Sater found that open-kettle canning cost less than cold pack or hot pack and took less time. She tried apples, peaches and tomatoes by all three methods.

Of course, for meat and most vegetables, the open-kettle method is not safe. Here steam pressure is the method. Miss Sater has some advice to give on buying a pressure cooker. Cookers made of enameled or tinned steel, she says, cost less than those of cast aluminum. If used with care, they may give as good service. As to the size cooker to buy, she advises buying as large a size as you can handle comfortably to cut canning costs and time. She says that a larger cooker takes less cooking time than a small one, but that an 18-quart size is about as large as a housewife can handle. When filled with cans of food, this size often weighs 30 or 40 pounds.

What about the stove -- or rather, the fuel for canning? Miss Sater tried jars and cans of all standard sizes on electric, coal, wood, gas, gasoline, and kerosene stoves and reports that gasoline and kerosene were the cheapest fuels. (Again, she considered only the costs in her State.)

Finally, about the total cost of canning. Not counting the cost of the food, but adding up both equipment and fuel, Miss Sater figured that home canning of fruits and vegetables costs about 5 to 6 cents a container if you can over a period of years.

Now come over to the Massachusetts Station where three scientists have been trying to solve one of the big problems in canning with glass. As you know, the usual method of processing food in glass is to partially seal the jar before it goes into the water bath or pressure cooker, and to completely seal it only after processing. As the food heats, it gives off steam and gas. The partial seal allows these vapors to escape without breaking the jar. The trouble is that good juice also escapes from the jar, especially during pressure canning. That leaves an unattractive product, often with solid pieces of food standing above the juice. They soon discolor and change in flavor.

The Massachusetts scientists believe that this partial seal precaution is unnecessary. They found that jars fully sealed stood processing if a large head-space was left at the top of the jar and if the pressure was released slowly. In most of the tests they used 10 pounds pressure. They say that the clamp of the jar, though fastened, still has enough "give" to release steam and gas, but that it allows much less liquid to escape. Some 64 Massachusetts housewives experienced in canning tried out this method using 16 thousand 500 jars, new and used, and 50 different foods. Of the jars packed, 85 percent had no noticeable loss of liquid. The amount of breakage was small. These findings may do away with one disadvantage of canning in glass.

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